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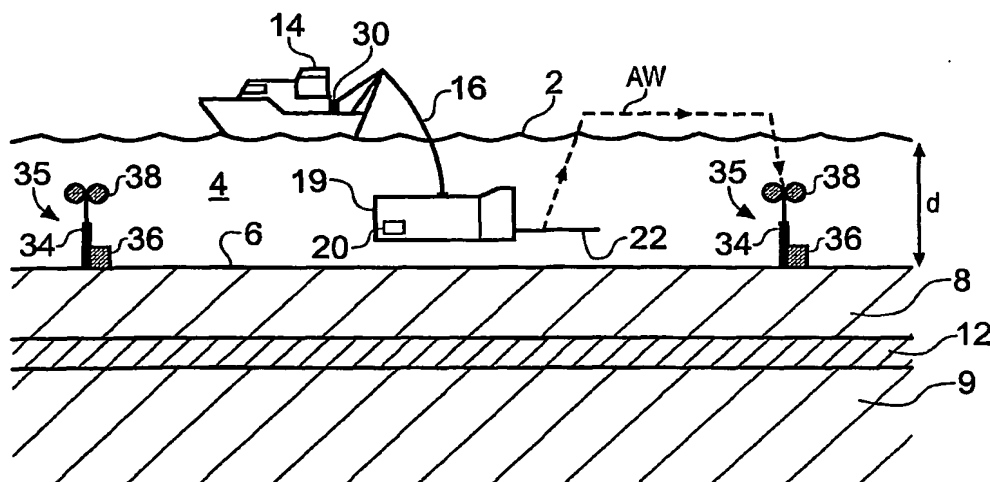
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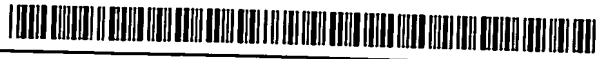
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(54) Title: ELECTROMAGNETIC SURVEYING FOR HYDROCARBON RESERVOIRS



(57) Abstract: A method of electromagnetic surveying of an area of seafloor that is thought or known to contain a subterranean hydrocarbon reservoir is described. The method includes broadcasting an EM signal from a horizontal electric dipole (HED) transmitter and obtaining vertical electric dipole (VED) response data at a remote receiver in response thereto. Survey data are analysed by comparing the VED response data with background data which are not sensitive to the postulated hydrocarbon reservoir. Accordingly, differences between the VED response data and the background data allow for the identification of buried hydrocarbon reservoirs. The background data may be provided by magneto-telluric surveying, controlled source electromagnetic surveying or from direct geophysical measurement. By employing VED response data in this way, surveys may be performed in shallower water than has previously been possible since the VED detector is not sensitive to air-wave components of the EM field induced by the HED transmitter at the VED detector.

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